

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Previously Presented) A process for the manufacture of a hydrogen storage material, the process comprising comminuting a source of magnesium under a reducing atmosphere for a time sufficient to produce particles of a required particle size and crystallite size, and introducing at least one reducible platinum group metal (PGM) compound; wherein the at least one PGM compound is substantially reduced in oxidation state during comminution, and is distributed substantially at the surface of the particles.
2. (Original) A process according to claim 1, wherein the reducing atmosphere comprises hydrogen.
3. (Previously Presented) A process according to claim 1, wherein the source of magnesium is selected from the group consisting of magnesium metal, magnesium hydride, an alloy of magnesium metal with one or more other metals, an intermetallic compound of magnesium metal with one or more other metals, a hydrided alloy of magnesium metal with one or more other metals and a hydrided intermetallic compound of magnesium with one or more other metals.
4. (Previously Presented) A process according to claim 1, wherein the comminution step is carried out using a ball mill.
5. (Previously Presented) A process according to claim 1, wherein the at least one reducible PGM compound is introduced towards the end of the comminution step.
6. (Previously Presented) A process according to claim 1, wherein the at least one reducible PGM compound is selected from the group consisting of an oxide, a hydrated oxide, a halide, another salt and any mixture thereof.
7. (Previously Presented) A process according to claim-6.1, wherein the at least one reducible PGM compound is selected from the group consisting of PdO, PdO.H₂O, palladium black, ruthenium black and RuO₂.

8. (Previously Presented) A process according to claim 1, wherein the particles have an average particle size of less than 100 μ m.
9. (Previously Presented) A process according to claim 1, wherein the particles have an average crystallite size of less than 100nm.
10. (Previously Presented) A process according to claim 8, wherein the particles have an average crystallite size of less than 100nm.